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DHV TESTREPORT EN926-2:2014



GIN LEOPARD M

Type designation	GIN Leopard M
Type test reference no	DHV GS-01-2439-19
Holder of certification	GIN Gliders Inc.
Manufacturer	GIN Gliders Inc.
Classification	D
Winch towing	Yes
Number of seats min / max	1 / 1
Accelerator	Yes
Trimmers	No



BEHAVIOUR AT MIN WEIGHT IN FLIGHT (95KG)

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (112KG)

	Test pilots	
		
	Harald Buntz	Sebastian Mackrodt
	No release	No release
Inflation/take-off	B	B
Rising behaviour	en : einfaches Aufziehen, etwas Korrektur des Piloten erforderlich	en : einfaches Aufziehen, etwas Korrektur des Piloten erforderlich
Special take off technique required	No	No
Landing	A	A
Special landing technique required	No	No
Speeds in straight flight	A	A
Trim speed more than 30 km/h	Yes	Yes
Speed range using the controls larger than 10 km/h	Yes	Yes
Minimum speed	Less than 25 km/h	Less than 25 km/h
Control movement	C	D
Symmetric control pressure	Increasing	Increasing
Symmetric control travel	45 cm to 60 cm	35 cm to 50 cm
Pitch stability exiting accelerated flight	A	A
Dive forward angle on exit	Dive forward less than 30°	Dive forward less than 30°
Collapse occurs	No	No
Pitch stability operating controls during accelerated flight	A	A
Collapse occurs	No	No
Roll stability and damping	A	A
Oscillations	Reducing	Reducing
Stability in gentle spirals	A	A
Tendency to return to straight flight	Spontaneous exit	Spontaneous exit
en : Verhalten beim Verlassen einer vollständigen Steilspirale	D	D

en : Erstes Ansprechen des Gleitschirms (die en : keine unmittelbare Reaktion

en : keine unmittelbare Reaktion

Tendency to return to straight flight	en : Drehung bleibt konstant(G-Kraft konstant, Drehgeschwindigkeit konstant)	en : Drehung bleibt konstant(G-Kraft konstant, Drehgeschwindigkeit konstant)
Turn angle to recover normal flight	With pilot action	With pilot action
Symmetric front collapse	D	D
Entry	Rocking back less than 45°	Rocking back less than 45°
Recovery	Spontaneous in 3 s to 5 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 30° to 60°	Dive forward 0° to 30°
Change of course	Entering a turn of less than 90°	Keeping course
Cascade occurs	No	No
en : Faltleinen wurden benutzt	yes	yes
en : Symmetrischer Frontklapper mindestens 50% Flügeltiefe	D	D
Entry	Rocking back less than 45°	Rocking back less than 45°
Recovery	Recovery through pilot action in less than a further 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 30° to 60°	Dive forward 30° to 60°
Change of course	Entering a turn of 90° to 180°	Entering a turn of less than 90°
Cascade occurs	No	No
en : Faltleinen wurden benutzt	yes	yes
en : Symmetrischer Frontklapper im beschleunigten Flug mindestens 50% Flügeltiefe	D	D
Entry	Rocking back less than 45°	Rocking back less than 45°
Recovery	Recovery through pilot action in less than a further 3 s	Recovery through pilot action in less than a further 3 s
Dive forward angle on exit	Dive forward 30° to 60°	Dive forward 30° to 60°
Change of course	Entering a turn of 90° to 180°	Entering a turn of 90° to 180°
Cascade occurs	No	No
en : Faltleinen wurden benutzt	yes	yes
Exiting deep stall (parachutal stall)	C	C
Deep stall achieved	Yes	Yes
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 30° to 60°
Change of course	Changing course 45° or more	Changing course 45° or more
Cascade occurs	No	No
High angle of attack recovery	A	A
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Cascade occurs	No	No
Recovery from a developed full stall	B	B
Dive forward angle on exit	Dive forward 30° to 60°	Dive forward 30° to 60°
Collapse	No collapse	No collapse
Cascade occurs (other than collapses)	No	No
Rocking back	Less than 45°	Less than 45°
Line tension	Most lines tight	Most lines tight
en : Kleiner einseitiger Klapper	D	D
Change of course until re-inflation	90° to 180°	Less than 90°
Maximum dive forward or roll angle	Dive or roll angle 15° to 45°	Dive or roll angle 45° to 60°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs	No	No
Cascade occurs	No	No
en : Faltleinen wurden benutzt	yes	yes
en : Großer einseitiger Klapper	D	D
Change of course until re-inflation	Greater than 360°	90° to 180°
Maximum dive forward or roll angle	Dive or roll angle 45° to 60°	Dive or roll angle 60° to 90°
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	Spontaneous re-inflation
Total change of course	en : größer als 360° mit der Tendenz zum Erholen (G-Kraft nimmt ab, Drehrate nimmt ab)	Less than 360°
Collapse on the opposite side occurs	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs	No	No
Cascade occurs	No	No
en : Faltleinen wurden benutzt	yes	yes
en : Kleiner einseitiger Klapper im beschleunigten Flug	D	D
Change of course until re-inflation	90° to 180°	180° to 360°

Maximum dive forward or roll angle	Dive or roll angle 15° to 45°	Dive or roll angle 45° to 60°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs	No	No
Cascade occurs	No	No
en : Faltleinen wurden benutzt	yes	yes

en : Großer einseitiger Klapper im beschleunigten Flug	D	D
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Change of course until re-inflation	Greater than 360°	180° to 360°
Maximum dive forward or roll angle	Dive or roll angle 45° to 60°	Dive or roll angle 60° to 90°
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	Inflates in less than 3 s from start of pilot action
Total change of course	en : größer als 360° mit der Tendenz zum Erholen (G-Kraft nimmt ab, Drehrate nimmt ab)	Less than 360°
Collapse on the opposite side occurs	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs	No	No
Cascade occurs	No	No
en : Faltleinen wurden benutzt	yes	yes

Directional control with a maintained asymmetric collapse	A	A
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Able to keep course	Yes	Yes
180° turn away from the collapsed side possible in 10 s	Yes	Yes
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel	More than 50 % of the symmetric control travel

Trim speed spin tendency	A	A
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Spin occurs	No	No
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Low speed spin tendency	A	A
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Spin occurs	No	No
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Recovery from a developed spin	A	A
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Spin rotation angle after release	Stops spinning in less than 90°	Stops spinning in less than 90°
Cascade occurs	No	No

B-line stall		
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Not carried out because the manoeuvre is excluded in the user's manual

Big ears	B	B
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Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Recovery through pilot action in less than a further 3 s	Recovery through pilot action in less than a further 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°

Big ears in accelerated flight	B	B
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Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Recovery through pilot action in less than a further 3 s	Recovery through pilot action in less than a further 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Stable flight

Alternative means of directional control	A	A
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180° turn achievable in 20 s	Yes	Yes
Stall or spin occurs	No	No

Any other flight procedure and/or configuration described in the user's manual	C	C
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Description of manoeuvre / configuration	B-3	B-3
Procedure works as described	Yes	Yes
Procedure suitable for novice pilots	No	No
Cascade occurs	No	No